

**Abstract**

The invention relates to cellular communications systems. In order to enhance an efficiency of a cellular communications system a file in electronic form with fragments of a digital geographical map of the vicinity is preliminarily introduced into a control center of a cellular communications system, the map comprising coordinates and characteristics of base stations, arranged in cells and geographical coordinates of the borders of the cells, wherein in the process of radio communications, data on the location of a corresponding mobile station for communication therewith are determined with the aid of a receiver of a satellite location determination system, which receiver is built in a mobile station, and are transmitted through a base station to the control center of the cellular communications system, and the file of a fragment of the digital geographical map is transmitted from the control center of the cellular communications system through a corresponding base station to a mobile station, the map comprising coordinates and characteristics of the base station of that cell where this mobile station is, coordinates and characteristics of base stations of neighboring cells with coordinates of their borders, then a comparison of current data of its location and the coordinates of cell borders is carried out in the mobile station. 5 sheets of illustrations.